

# Jefferson County Land & Water Conservation Department Annual Report ~ 2013 to 2014

## *Conservation in Jefferson County*

Since 1946, Jefferson County has been providing assistance to landowners to protect our soil and water quality. In 1982, the County officially established the Jefferson County Land and Water Conservation Department. The department has been charged with administering State Statutes and County ordinances all leading to the conservation and protection of our natural resources. We are pleased to provide you with our 2013~2014 annual report. Anyone wishing further information on any of our programs is welcome to stop in or call the Land & Water Conservation Department for more details.

## *Conservation Compliance on Track for Farmland Preservation*

On January 1, 2010, the new Wisconsin Farmland Preservation Program under the Working Lands Initiative went into effect, offering many farm owners greater tax relief and more protection of our State's soil and water resources.

Under the new program, farm owners must comply with Wisconsin Statute NR 151 Non-point Runoff rules. There are essentially three requirements to the rules:

- ◆ All farms must have and follow an approved conservation plan.
- ◆ All farms must have and follow an approved nutrient management plan.
- ◆ All livestock farms must meet manure management prohibitions and performance standards.



In Jefferson County, the Department has set dates by which each requirement of the Non-point rules must be met. Currently all program participants have met the first two requirements.

County Resource Conservationists have evaluated over three-quarters of the Farmland Preservation participants to determine their compliance status with manure management prohibition and performance standards. The remaining evaluations are expected to be complete by September of 2014.

To evaluate manure management and livestock compliance, Resource Conservationists preview each livestock farm using the County's GIS to determine proximity to water resources and water quality management areas (WQMA). Facilities that are in close proximity to water resources or are located in a WQMA are scheduled for a site visit to determine compliance. Staff looks for direct discharge to a stream, river, lake or wetland, trampled stream banks, manure storage structures problems and unconfined manure stacks. When problems are identified, the producer is given direction on how to correct the situation and put on schedule of compliance. Staff also looks for possible cost-share resources when applicable to assist in project implementation.

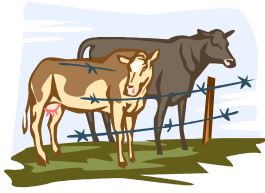
In Jefferson County, current enrollment in the Farmland Preservation Tax Credit is 689 participants covering approximately 114,811 acres, returning over \$861,000 to County landowners (Based on \$7.50 per acre credit.).

## *Farmland Preservation Program (FPP) and Working Lands Initiative (WLI)*

2014 is the fourth year of the Wisconsin Farmland Preservation Program under the new Working Lands Initiative (WLI). The department continues to work with Jefferson County landowners and producers to transition into the new program. The following is a list of activities for September 2013/2014 time period:

- ◆ Managed 689 conservation plans covering 114,811 acres.
- ◆ Assisted 30 new participants become eligible for the tax credit.
- ◆ Processed 24 notices of non-compliance or non-participation.
- ◆ Completed 113 on-farm status reviews for compliance with the WLI requirements.
- ◆ Completed 33 evaluations of livestock facilities on farms for compliance with the WLI requirements.
- ◆ Held one full training class for farmers to learn to write their own nutrient management plans.
- ◆ Held four update classes to assist nutrient management class graduates.

## Nutrient Management and Livestock



Under State Statute NR 151, agricultural producers are required to follow conservation performance standards. These rules regulate manure management and require the use of soil conservation and nutrient management plans by all producers. Additionally under State Statute and County Ordinance, livestock producers wishing to start or expand a herd of over 150 animal units (one animal unit equals 1,000 pounds of animal weight) must apply for a Livestock Siting Conditional Use Permit. The Department works cooperatively with the Zoning Department on these permits.

If livestock producers are not expanding their animal numbers but are building, modifying or abandoning manure storage facilities, the Department requires a permit under the County Manure Storage Ordinance.

For the 2013 ~2014 report year, the Department:

- ◆ Revised the County Manure Storage Ordinance to bring it up to date with current State laws.
- ◆ Issued one permit for closure of manure storage facilities and two permits for new waste storage system under the County Manure Storage Ordinance.
- ◆ Reviewed four new Livestock Siting Permit applications, as well as two amended applications and provided a completeness determinations to the Zoning Department and Committee.
- ◆ Conducted 33 inspections for livestock related regulations in both NR 151 and the Farmland Preservation Program.
- ◆ Investigated 11 manure management related complaints with corrective action taken as needed.
- ◆ Cost shared with 4 landowners for proper closure of unused manure storage facilities and one Roof Runoff System for an animal lot.
- ◆ Cost shared with 7 landowner for nutrient management planning on approximately 626 acres, with an additional 400 acres pending at this time.
- ◆ Received checklists covering 1,169 farms with a nutrient management plan (NMP's) for compliance with State Statute and County Ordinance.

## Agricultural Conservation Easements (PACE)

- ◆ Initiated transition of Land & Water Conservation Department's administration and assistance for the Farmland Conservation Easement Commission.
- ◆ Department assisted with determining State agricultural standard compliance by inspecting five (5) properties.
- ◆ Under guidance of the County Farmland Conservation Easement Commission, modified guidelines, best practices and templates for Baseline Property Reports and annual monitoring.
- ◆ Compliance Monitoring: Four (4) donated easement properties, one easement for a cooperating agency and land trust.
- ◆ Reviewed public records relevant to agriculture, natural resources and easement compliance on the covered land.
- ◆ Maintained and compiled IRS compliant documents utilizing the Easement Commission's approved guidelines.
- ◆ Preliminary work on baseline study report for one property with proposed closing slated for late 2014 or early 2015.

## Non-Metallic Mining

To operate a non-metallic mine (sand, gravel, stone and topsoil) for commercial extraction, quarry owners must apply for a Non-Metallic Mining permit. Part of the permit process is the submission of a reclamation plan detailing how the land will be restored when the quarry is no longer in use. During the report year:

- ◆ Fees collected; \$11,640 - of which \$2,260 was reimbursed to the DNR and remainder - \$9,415 earmarked for LWCD administrative expenses.
- ◆ Thirty three (33) sites inspected, to include active, inactive, recently reclaimed and exempt extraction sites.
- ◆ Inspected site characterizations: Active: 1-5 acres 8 permits; 6-10 acres 3 permits, 11-15 acres 6 permits, 16-25 acres 2 permits; 26-50 acres 2 permits; >50 acres 3 permits. Inactive; 1 site. Exemption; 5 sites. Fully Reclaimed; 3 sites w/ completion certificates issued summer 2014
- ◆ Permit Transfers & Approvals: 2 permit transfers approved and Financial Assurance updated
- ◆ Under the direction and guidance of Corporate Counsel, continued working toward resolution involved with the BR Amon receivership proceedings.
- ◆ Maintained all changes in GIS database and associated tabular data.
- ◆ Prepared Annual Newsletter to provide information and updates to operators and landowners.
- ◆ Attended three DNR organized training events and meetings

Sources: WDNR NR135, Jefferson County Nonmetallic Mining Ordinance & onsite inspections.

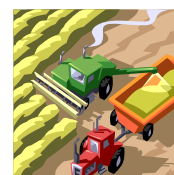
## Information & Education Activities

- ◆ Published and distributed over 700 copies of an FPP special edition departmental newsletter, **Conservation Counts**.
- ◆ Promotional & programming information was distributed at the Jefferson County Fair.
- ◆ Participated in the Annual 4th Grade Farm Day giving presentations to 1012 students and their teachers.

## Soil Conservation

Part of the mission of the Jefferson County Land and Water Conservation Department is to insure that farmland remains productive for generations to come. Through cooperative partnering with the Natural Resources Conservation Service (NRCS) and the Farm Service Agency, the LWCD works with Jefferson County producers to recommend and install Best Management Practices that will control soil loss and improve water quality. The Land and Water Conservation Department:

- ◆ Data acquired at nearly 500 locations with 779 active farming locations
- ◆ 86.5 % of the cropped acreage at or below tolerable soil loss (T), nearly the same as the previous year.
- ◆ Average countywide soil loss is 2.3 tons/acre/year. The average maximum tolerable soil loss 4.5 tons/acre/year, in the Oconomowoc River Watershed.
- ◆ 39 % of cropland was planted to corn, up from 35% in 2013.
- ◆ 28 % of cropland was planted to soybeans, up from 26% in 2013
- ◆ 5 % of cropland was in small grains (wheat, oats, etc.), down from 9% in 2013.
- ◆ Hay made up 17 % of the crop land, compared to 15 % in 2013
- ◆ 5 % of crop land was found fallow, compared to 10% in 2013
- ◆ 56 % of the crop land was tilled using reduced tillage methods, similar to 2013
- ◆ 38 % of the crop land showed less than 30 % crop residue, while nearly 36% having 30 % residue or over
- ◆ 18 % of the land was no-tilled, up from a couple of points from the previous 3 year average
- ◆ Less than < 1 % conventional tillage (moldboard plow) system used.
- ◆ Developed a contract for Conservation Reserve Enhancement Program, a State/Federal and County partnership. A contract for one stream buffer project was developed covering 28.1 acres.



Data sources: WinTransect software application ver. 1.18.1.0 UW Soils Department and data input by LWCD staff.

## Geographic Information and Cartography

- ◆ Utilized current FPP tracking database system to input and maintain a countywide parcel dataset of participants
- ◆ Converted department datasets (Access/Excel) to an updated database system (SQL Server) per the Land Records Modernization Plan.
- ◆ Input and updated nearly 2000 additional parcels into the database management system for State Ag Run-off Rule (NR151) compliance. The input process for compliant parcels is nearing completion and should provide a cohesive data repository for the Working Lands Initiative (WLI) compliance.
- ◆ Continued to develop a report generation system for FPP/NR151 and WLI compliance from the parcel database.
- ◆ Published, implemented, and maintained internet map services utilized by web map viewers to provide end users with location and attribute information.
- ◆ Completed an updated GHA Water Trails Map, a collaboration with Land Information Office, Parks Department and other Public/Private stakeholders.
- ◆ Continued to update Frozen Parcel data for County Zoning purposes. Created and maintained all Conservation Easement Parcels. Created several recreational trail datasets for County Park's analysis and display.
- ◆ Provided mapping and data compilation for PACE applications – also see Agricultural Conservation Easement.
- ◆ Continued to pursue database enhancements and consolidation for ease of use, access and representation.
- ◆ Assisted with implementation of a GIS hardware & software upgrade for the Lake Ripley Management District. Also configured a data set for the Lake District Manager to utilize.
- ◆ Attended or participated in over 40 hours of training/seminars directly related to GIS, land records and database administration.

## Wildlife & Habitat

The Land & Water Conservation Department engages in the following activities to enhance wildlife habitat:

- ◆ For the 2013/2014 program year, 9,300 trees/shrubs were sold through the Annual Sale. Nine species were offered through the sale which starts in the fall of each year.
- ◆ Coordinate the rental of tree planters and sprayers with the DNR Foresters.
- ◆ Assists the DNR with the Wildlife Damage and Abatement Program that reimburses crop producers for damages caused by deer, geese and turkey.

## ***The Emerald Ash Borer has been confirmed for the first time in Jefferson County***

Although EAB previously had not been found in Jefferson County, the county has been under quarantine for EAB since July 2013, when an infestation was discovered in the Whitewater area. The infestation was in the part of the city that lies in Walworth County, but was just hundreds of feet from Jefferson County. A Wisconsin Department of Natural Resources employee found the insects while conducting surveys for woodpecker damage at a boat landing in Prince's Point State Wildlife Area. This confirmed the presence of the insects in Jefferson County in 2014.

Property owners can take the following steps, while action plans are being considered.

- ◆ Watch ash trees for signs of possible EAB infestation: Thinning in the canopy, D-shaped holes in the bark, new branches sprouting low on the trunk, cracked bark, and woodpeckers pulling at the bark to get to insect larvae beneath it.
- ◆ If your property is within 15 miles of a known infestation, consider preventive treatments. Whether to treat depends on several factors: the age of the trees, the size of the trees, and the number of trees. Treatment costs vary depending on size of the tree and whether you do the treatments yourself or hire a professional.
- ◆ Consider planting different species of trees that are not susceptible to EAB.
- ◆ Contact a professional arborist for expert advice, and visit [emeraldashborer.wi.gov](http://emeraldashborer.wi.gov) or the LWCD County webpage for detailed information.

## ***Water Resources***

Maintaining and enhancing ground and surface water quality is critical to the health, safety and recreation of residents and visitors of Jefferson County. The following are water resources activities the Department has engaged in:

### ***Clean Boats & Clean Waters Training***

- ◆ Trained citizen volunteers for Lake Ripley, Rock Lake, and Lower Spring Lake to educate lake users on Aquatic Invasive Species laws. Assisted the Town of Lake Mills in applying for a grant to hire 2 boat inspectors.

### ***Lake Ripley***

- ◆ Assisted the Lake Ripley Management District: provided expert advice, provided feedback on reports and grant applications, and provided input on hiring of the new lake manager. Created a display on the benefits of aquatic plants and presented it at the lake fair.

### ***Lower Spring Lake Aquatic Plant Management***

- ◆ Continued to work on a DNR grant for the Lower Spring Lake Management District to implement their aquatic plant management plan. The grant covers expenses incurred by the LWCD for their work on the project. Educate citizens about aquatic plants and water quality. Conducted a plant survey prior to chemical treatment of the lake in the Spring. Conducted a whole lake plant survey in the summer. All of activities are done with the cooperation of the DNR and the Lower Spring Lake Management District.



### ***Rock Lake Water Quality Monitoring***

- ◆ In the summer, perform monthly water quality sampling with a citizen to monitor temperature, dissolved oxygen, clarity, chlorophyll and phosphorus. In the winter, monitor chloride levels in the lake.

### ***Rock Lake: Southwest Subwatershed Project***

- ◆ Assisted partners (Rock Lake Improvement Association and Montgomery Associates) on a grant project to investigate the sources of sediment, nutrients, and bacteria in a tributary to Rock Lake. Educated citizens at a public meeting associated with the project.

### ***Rock and Mud Lake Fish Survey***

- ◆ Worked on a DNR grant with a consultant to assess the near-shore fish community in Mud and Rock Lakes. Conducted surveys, compiled data, and wrote report. The grant covered cost of all county expenses plus some of the staff time.

### ***Rock Lake Shoreland Rules***

- ◆ In partnership with the Rock Lake Improvement Association and the Joint Rock Lake Committee, provided feedback to the City of Lake Mills on proposed zoning ordinance language that impacts surface water resources.

### ***Rock Lake Under Ice***

- ◆ Worked with the Rock Lake Improvement Association to organize and implement lake education associated with the Lake Mills Knickerbocker Ice Festival.

### ***Stream Monitoring***

- ◆ Assisted the Rock River Coalition at a citizen stream monitoring training workshop. Worked with citizen volunteers to monitor streams in Jefferson County. In the past year, there have been 22 citizens who volunteer at 17 sites on 12 streams and rivers. Parameters monitored include temperature, dissolved oxygen, clarity, flow, and biotic index (based on the type of water insects). This work performed by citizens gives us information on the resources that we don't have time/money to gather ourselves.
- ◆ Organized and facilitated a panel discussion on nutrient management and water quality protections for the Rock River Coalition's workshop for stream monitors.

## ***Grants and Budgets***

Much of the funding for the Jefferson County Land and Water Conservation Department comes from the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). The Department actively looks for outside sources of revenue to reduce the amount of County Levy dollars requested.

- ◆ Applied for and received operational grants from the DATCP totaling \$165,000.
- ◆ Total Service Provider Contracts with NRCS have not been available for 2014.
- ◆ Student Intern earmarks have been discontinued indefinitely.
- ◆ The certification and permit fees generate approximately \$19,000 in revenue to the LWCD.
- ◆ Received \$20,000 in Land and Water Resource Management cost sharing dollars from DATCP.
- ◆ Received \$28,000 in State Grant funding from DATCP for nutrient management cost sharing.
- ◆ Generated \$7,425 in gross revenue from the Annual Tree and Shrub sale.
- ◆ New County Farm Lease generates \$105,000 annually

## ***Nutrient Management Farmer Education Grant***

In November of 2013, the Jefferson County Land and Water Conservation Department applied for and was awarded a Nutrient Management Farmer Education Grant. The primary purpose of this grant was to cost-share the purchase of a set of weigh pads for the Department to use in weighing and calibrating manure spreaders. Spreader weighing and calibration are part of the on-going effort of the Department to assist farmers with complying with Farmland Preservation / NR151 rules and also to help fine tune their nutrient management plan.

The weighing and calibration process is very easy.

- ◆ The farmer loads his manure spreader with what he considers to be a typical amount of manure. Staff place scales in front of each rear axle tire of the tractor. The farmer drives up on the scales and that weight is recorded. The scales are then moved to the spreader's axles and that weight is recorded.
- ◆ Next the farmer spreads the manure, going at their typical speed. The distance and width of the unloaded manure is measured to calculate the area covered.
- ◆ The spreader and tractor are weighed unloaded and the difference is divided by 2000 to come up with the number of tons the spreader holds. Based on the area spread, a calculation can be made of tons per acre of manure spread.
- ◆ Standard book values can be used to determine the nutrient content of the manure or a farmer may choose to have a sample sent to a lab for an accurate analysis. This information is then added to the farm's nutrient management plan and helping assure more accurate crediting of nutrients.

In addition to funding the scales, some of the grant was also used to purchase materials for the Department's Nutrient Management Farmer Training classes.

## ***Looking Ahead to 2014 - 2015***

As ever, the Department will strive to meet the concerns of the citizens of Jefferson County and protect our soil and water resources.

### ***~ Future Goals and Activities ~***

- ◆ Develop a strategy for implementing the newly promulgated NR151 conservation standards as part of the eligibility requirements of Farmland Preservation.
- ◆ Issue Certificates of Compliance for all eligible Farmland Preservation participants over the next 12 months.
- ◆ Offer additional training and update sessions for farmers to write their own nutrient management plans.
- ◆ Monitor developments in the spread of the Emerald Ash Borer and Gypsy Moth, including potential development of an action plan.
- ◆ Monitor new developments in manure management.
- ◆ Serve on Rock River Recovery Agriculture Sector Team.
- ◆ Finish implementation of the NR151 tracking system.
- ◆ Continue to supervise maintenance of the Jefferson County Potters Field.
- ◆ Department Director continued participation in County Advisory Committee with NRCS and FSA.





## Jefferson County Land & Water Conservation Department



Pictured left to right:  
Kim Liakopoulos, Administrative Clerk  
Mark Watkins, Director  
Nancy Lannert, Resource Conservationist  
Gerry Kokkonen, GIS/Land Use Specialist  
Patricia Cicero, Water Resources Mgmt Specialist  
Joseph Strupp, Resource Conservationist

### Jefferson County Land & Water Conservation Committee

Matt Foelker (Chairman), Carlton Zentner (Vice Chair), Pete Hartz (Secretary),  
Ed Morse (Member), Frank Anfang (FSA Rep)

### Partnering Agencies & Contacts

The Jefferson County Land & Water Conservation Department works cooperatively with a number of State and Federal Agencies. The following is a list of agencies and contacts:

#### Federal

##### **Farm Service Agency (FSA)**

Executive Director  
Debra Schut  
134 W Rockwell St  
Jefferson, WI 53549  
(920) 674-2020 x 107

##### **Natural Resources Conservation Service (NRCS)**

District Conservationist  
Dennis Vollmer  
134 W Rockwell St  
Jefferson, WI 53549  
(920) 674-2020 x 104

##### **US Department of Agriculture**

Animal Damage Abatement Program  
David Terrell  
(800) 433-0663

#### State

##### **DATCP**

WI Dept of Agriculture, Trade & Consumer Protection  
Bureau of Land & Water Resources  
(608) 224-4621

##### **DNR Foresters**

Randy Stampfl  
(920) 387-7884

##### **DNR Conservation Warden**

Ryan Ellifson  
(920) 728-0367

##### **DNR Lakes Monitoring Coordinator**

Susan Graham  
(608) 275-3329

### ~ Working Lands Initiative Contacts ~

State Website: <http://workinglands.wi.gov>  
State Email: [DATCPWorkingLands@Wisconsin.gov](mailto:DATCPWorkingLands@Wisconsin.gov)

"Good farmers, who take seriously their duties as stewards of Creation and of their land's inheritors, contribute to the welfare of society in more ways than society usually acknowledges, or even knows. These farmers produce valuable goods, of course; but they also conserve soil, they conserve water, they conserve wildlife, they conserve open space, they conserve scenery."

Wendell Berry, *Bringing it to the Table: Writings on Farming and Food*